

Amendments to the Claims:

1. (Currently Amended) A method of detecting the presence of a disseminated epithelial cell marker in a sample comprising the steps of

- a) eliminating CD34+ ~~illegitimate transcription-positive~~ cells from the sample; and
- b) detecting the presence of mRNA that encodes the marker;

wherein the marker is a differentiation-specific antigen.

2. (Currently Amended) The method of claim 1, wherein the disseminated epithelial cell marker is a tissue-specific marker.

3. (Original) The method of claim 2, wherein the tissue is selected from the group consisting of colon, lung, prostate, testis, breast, liver, and skin.

4. (Currently Amended) The method of claim 1, wherein the disseminated epithelial cell marker is selected from the group consisting of guanylyl cyclase C, Cdx-1, Cdx-2, sucrase isomaltase, lactase, carbonic anhydrase, prostate specific antigen, prostate specific membrane antigen, cytokeratin 18, cytokeratin 19, cytokeratin 20, ~~carcinoembryonic antigen~~, ErbB2, Erb-B3, epithelial mucin-1, epithelial mucin-18, gastrointestinal tumor associated antigen 733.2, desmoplakin I, epithelial glycoprotein 40, tyrosinase, thyroglobulin, tyrosine hydroxylase, and neuron-specific glycoprotein.

Claim 5. Canceled.

6. (Currently Amended) The method of claim ~~5~~1, wherein the CD34+ cells are removed by column chromatography.

7. (Original) The method of claim 1, wherein the sample is tissue or bodily fluid.

8. (Original) The method of claim 1, wherein the sample is selected from the group consisting of blood, lymph tissue, and bone marrow.

9. (Original) The method of claim 1, wherein the mRNA is detected a polymerase chain reaction (PCR)-based method.

10. (Original) The method of claim 1, wherein the mRNA is detected by reverse transcriptase (RT)-PCR.

11. (Original) The method of claim 1, wherein the mRNA is detected by nested RT-PCR.

Claim 12. Canceled

13. (Currently Amended) The method of claim 1, wherein the disseminated epithelial cell marker is selected from the group consisting of guanylyl cyclase-C (GC-C), prostate-specific antigen (PSA), prostate-specific membrane antigen (PSM), ~~carcinoembryonic antigen (CEA)~~, cytokeratin-19 (CK-19), cytokeratin-20 (CK-20), mucin 1 (MUC-1), and gastrointestinal-associated antigen (GA733.2).

14. (Original) The method of claim 1, wherein the marker is GC-C.

15. (Currently Amended) The method of claim 1, wherein the disseminated epithelial cell marker is a cell marker for a metastatic colon cancer cell.

Claims 16-36 Canceled

37. (Newly Presented) The method of claim 1 wherein the sample comprises mononuclear cells isolated from blood.

38. (Newly Presented) The method of claim 37, wherein the disseminated epithelial cell marker is a tissue-specific marker.

39. (Newly Presented) The method of claim 38, wherein the tissue is selected from the group consisting of colon, lung, prostate, testis, breast, liver, and skin.

40. (Newly Presented) The method of claim 37, wherein the disseminated epithelial cell marker is selected from the group consisting of guanylyl cyclase C, Cdx-1, Cdx-2, sucrase isomaltase, lactase, carbonic anhydrase, prostate specific antigen, prostate specific membrane antigen, cytokeratin 18, cytokeratin 19, cytokeratin 20, ErbB2, Erb-B3, epithelial mucin-1, epithelial mucin-18, gastrointestinal tumor associated antigen 733.2, desmoplakin I, epithelial glycoprotein 40, tyrosinase, thyroglobulin, tyrosine hydroxylase, and neuron-specific glycoprotein.

41. (Newly Presented) The method of claim 37, wherein the CD34+ cells are removed by column chromatography.

42. (Newly Presented) The method of claim 37, wherein the mRNA is detected a polymerase chain reaction (PCR)-based method.

43. (Newly Presented) The method of claim 37, wherein the mRNA is detected by reverse transcriptase (RT)-PCR.

44. (Newly Presented) The method of claim 37, wherein the mRNA is detected by nested RT-PCR.

45. (Newly Presented) The method of claim 37, wherein the disseminated epithelial cell marker is selected from the group consisting of guanylyl cyclase-C (GC-C), prostate-specific antigen (PSA), prostate-specific membrane antigen (PSM), cytokeratin-19 (CK-19), cytokeratin-20 (CK-20), mucin 1 (MUC-1), and gastrointestinal-associated antigen (GA733.2).

46. (Newly Presented) The method of claim 37, wherein the disseminated epithelial cell marker is GC-C.

47. (Newly Presented) The method of claim 37, wherein the disseminated epithelial cell marker is a cell marker for a metastatic colon cancer cell.